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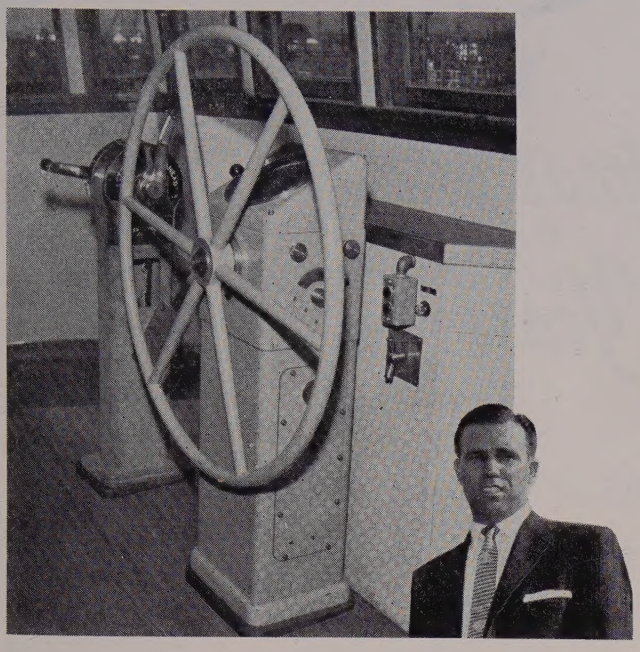

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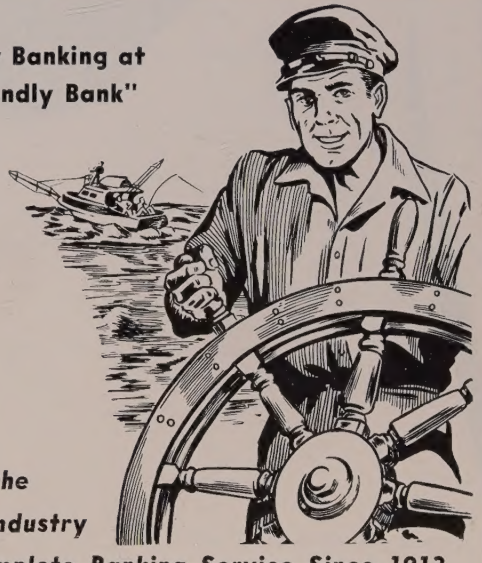

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About This Issue . . .

Our hats are off to the Soares Brothers, who ordered the boats, and to the National Steel organization which built them. Of course we're talking about the new tuna clippers, the Cabrillo and the Dominator which are featured in this issue.

*

You don't just up and order a couple of $500,000 boats unless you mean business and have a lot of confidence in the industry. The Soares boys are not "prophets of gloom" and we like that. So well that we're devoting eight pages to the story and illustrations of "Two New Tuna Clippers," starting on page 12.

The American public likes tuna and is eating more and more of it with each passing year. This fact along with some other good ones lead experts to believe the consumption of canned tuna will steadily increase from 10 billion to 17 billion cans per year. That's a big increase . . . and well covered in the article "What's Next in the Tuna Industry?" by Ed Morris on page 10.

*

All this lays a sound foundation for us to wish every reader A Merry Christmas and Happy New Year!

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Foreign Trade and GATT

By O. R. STRACKBEIN

THE Nation-Wide Committee of Industry, Agriculture and Labor on Import-Export Policy is composed of about 60 organizations or groups that are deeply concerned over the foreign trade policy of this country. Their interest arises from their exposure to injury from import competition. Membership is widespread and extends to every state in the country.

We do not regard GATT favorably so far as United States membership in it is concerned. GATT stands for General Agreement on Tariffs and Trade.

The Constitution expressly places the responsibility of laying and collecting taxes and *duties* upon Congress. It likewise places upon Congress *the power to regulate our foreign commerce.*

The GATT question cannot be considered properly without raising constitutional questions. One of the greatest of the foreign-trade-policy difficulties experienced by this country today has arisen because constitutional considerations were brushed aside by the framers of our participation in the General Agreement on Tariffs and Trade.

As GATT is presently set up, certain provisions curtail our freedom of action. An outstanding example lies in the general ban on quantitative import restrictions or quotas.

Now, the question of import quotas is a controversial one. Actually quotas are superior to tariff restrictions in many instances and make possible a more liberal trade policy in some cases than would recourse to the tariff alone. Whenever Congress has acted on quotas, as it has more than once, it has not besitated to establish them. In other words, there is no evidence that Congress is opposed to quotas in principle. Yet the State Department representatives in agreeing to the ban on quotas in GATT, undertook to settle this question out of hand once and for all for the entire American electorate!

The American people in no existing document have surrendered their right to elect representatives to carry out the will of the electorate. Questions of tariff and trade are vital questions touching the lives and economic welfare of millions of people. The voters have an inalienable right under the Constitution to support or to vote against candidates who would or would not promote protection of American industry, agriculture and labor.

The recent Act levying a duty on fish sticks provides a clear example of the Congressional position. The bill though passed in spite of GATT called on the President to *negotiate* the new rates in order to square them with our international obligations.

The way to overcome this unwholesome condition is to withdraw from GATT, then fix authority as between the legislative and the executive in the field of tariffs and trade. Otherwise this country will court wholly unnecessary misunderstanding and distrust from other countries and needless embarrassment and bitterness at home. *

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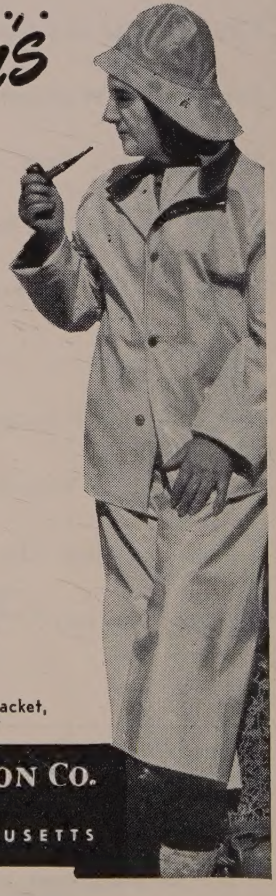

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Report from Washington

Gleaned from the Nation's Capital by John Harms

A YEAR OF DECISION.--The new year may go down in history as one of the most significant in the life of the tuna industry. Forces now shaping up point to 1955 as a year of decision for the industry. Final result of the clash of these forces may tell whether the industry is helped or hurt in the long run.

Why the new year may be of such importance to the well-being of the industry can be summed up in one word: Tariffs. The federal government Administration is bent on a wide-open drive to lower tariffs almost across the board. But of even more significance to the tuna industry is its deep desire to improve the export trade position of Japan.

On the other side of the tariff question are the congressmen from tuna districts who have pledged themselves to fight for protection against "unreasonable" tuna imports. Congressional efforts to impose new import restrictions and duties on tuna failed during the last session of Congress, but there is reason to believe a new drive will be launched.

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FREER TRADE POLICY.--The Eisenhower Administration has plugged for freer trade among friendly countries of the world as one means of combatting communism. Its efforts to get Congress to go along last year were blocked by the conservative wing of the Republican party. Ike had asked for a 3-year extension of the Reciprocal Trade Agreements Act, permitting him to negotiate tariff reductions with member nations. But the act was extended for only one year.

In the new Congress, it probably will be very different. The President's State of the Union message in January will again ask for a 3-year extension of the trade-liberalizing law. Insiders say his message will emphasize the importance of trade concessions as a means of building up the economic stability of our friends abroad. Reception of this proposal will likely be favorable. The Democratic high command, which will run Congress starting in January, has already come out with a policy statement declaring one of its aims to be a 3-year extension of the controversial act. As of now the voting line-up indicates the law will be extended the full time. It is now due to expire in June.

--o--

BLOW OF THE WIND.--The United States government is preparing to talk turkey with Japan on the tariff situation at a February meeting in Geneva, Switzerland, of the member nations of the General Agreement on Tariffs and Trade. In preparation for these talks--which will concentrate on trade concessions by the U.S. to Japan--hearings on specific presently restricted import items are being conducted by the Tariff Commission and the Committee for Reciprocity Information.

The General Agreement on Tariffs and Trade--GATT--is an agreement

among governments which contains a set of rules and principles by which member governments agree to conduct their mutual foreign trade relations. It provides a means to reduce tariffs and other governmentally-imposed barriers to international trade through negotiation.

The U.S. government has issued a lengthy list of import items on which it is gathering information on the possibility of a concession. Fresh, frozen and canned tuna are on the list. Actually, the announcement published with the list says because an item appears on the list, it does not necessarily mean a concession will be offered Japan on the product.

The Geneva conference will consider making Japan a member of GATT. If it is taken in, any tariff concessions the U.S. makes to the Land of the Rising Sun automatically is made to the 33 other members of GATT--under the "most-favored nation" principle.

--o--

TUNA CHANCES.--According to usually reliable sources here, the Administration looks on tuna as one of the main items for negotiation. It is said the U.S. is prepared to negotiate concessions on the fish, primarily because already it is a large Japanese export item to this country.

Along with tuna, other proposed items for trade concessions include: Cotton textiles, sewing machines, optical products, chinaware, jewelry, pearls, chemicals, toys, and other Japan-made items.

The odds at this time seem to be in favor of concessions on tuna. It will be up to the industry's spokesmen before government trade agencies --in cooperation with Congress--to guide the Administration on whether concessions should be made to Japan, and if so, what kind.

--o--

IT'LL BE A FIGHT.--While the Administration seems set on making concessions, there already are signs of discontent over the program. The wool industry, for one, has spoken up publicly against concessions on wool blankets. Toy manufacturers and cotton textile industry are expected to raise a row. Anti-tariff reduction forces will point out during the coming months, that while helping Japan increase her economy as one of our strongholds against world communism is an important policy, it should not be done to the detriment of domestic industry.

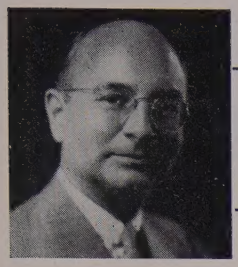
--o--

WORK STANDARDS FOR FISHERMAN.--The International Labor Organization's Committee of Experts on Conditions of Work for Fishermen, which met recently at Geneva, came up with some interesting recommendations. Harold E. Lokken, of Seattle, who attended the meeting, outlined the proposals for the National Fisheries Institute as follows:

"The conference of experts from 9 countries . . . has recommended new international principles for improving the work standards of fishermen. The conference recommended that:

(1) No persons under 15 years of age be employed on fishing vessels. (2) Fishermen have medical certificates certifying physical fit-

(Continued on page 25)



The Publisher's Page

Happy the man, and happy he alone,
He who can call today his own;
He who, secure within, can say,
Tomorrow, do thy worst, for I have liv'd today.
—John Dryden

Merry Xmas—This Is for Sure.—With business going good in almost all lines, with peace and prosperity pretty general throughout the world, this is one year when "Merry Christmas" means what it says.

When we were a youngster every Christmas was Merry and every New Year was Happy. Life was filled with fun and carefree days. As we grew older the realities took over; not every Holiday was really happy. We said the words but sometimes they had a hollow sound. There was a continual mixing of the good with the bad—first war then peace, boom then bust, sickness and health. That's life.

This year most people can say Merry Christmas and there's no doubt about it. The business indicators are all pointing up. Instead of the widely advertised depression, people now have started to talk about still better things ahead. Instead of World War III, which seemed just around the corner for the last four or five years, peace is pretty general now. While "little wars" probably will continue, there's not much chance of a major conflict soon.

All these things contribute to our sense of well being and happiness . . . and we hope you can say the same. Merry Xmas and Happy New Year!

Realism and the Holiday Spirit.—Even in these happy and comparatively carefree Holidays, the realist has some trying moments. He doesn't let them get him down and he doesn't run away from them, but he's puzzled about such points as these:

Have the American people lived in a "gimme" atmosphere so long that they are going to insist on the easy way out? Our realist knows that the easy way out is the hard way out in the long run. He knows that an honest dollar is desirable and worth the sacrifices necessary to get it. Yet he hears loud outcries against cuts in government expenditures (which are essential to a sound dollar) and wonders if any administration can survive politically if it does the things that are sound economically.

He questions all this security talk . . . security against sickness, joblessness, old age . . . security "on the cuff" instead of industry and thrift. He is amazed when youngsters apply for a job and ask first about vacations, overtime and pensions. These are nice ideas, but hard work, loyalty and honesty are the best insurance of success and freedom from want.

Despite such problems we all know that America is going forward—it is the one country where people not only live in contentment but are free to desire and obtain better products, newer styles and more conveniences.

Tuna Clipper Construction.—Featured in this issue are two boats recently launched in San Diego that embody some of the latest and best planning possible . . . and the description and illustrations on succeeding pages will bear this out.

These are especially noteworthy because they mark the first new additions to the tuna fleet for some time. These boats are interesting not only because they are new and modern but also because they reflect the confidence of the owners and builders in the basic soundness of the tuna industry.

You see, tuna clippers are designed as single purpose vessels; they are not easily converted to any other usage. Actually, tuna clippers are the most costly and most complicated fishing vessels built on the Pacific coast.

There are three main requirements that must be observed in every boat of this type: the vessel must be able to carry live bait for extended periods of time; the stern must be kept low so that fishermen may work at water level with ease at all times; and the vessel must be seaworthy under all conditions.

The Cabrillo and the Dominator meet all these requirements; they are well rounded, full bodied vessels, with a good beam and ample carrying capacity. As they head for the fishing grounds we wish them well . . . in weather, fair or foul; in catches, bountiful and profitable.

Talk About the Weather.—In looking back over 1954 one of the "bad" things has been the weather . . . either too wet or too dry, too cold or too warm. Floods and tornadoes also made headlines.

All this freakish weather has made many people wonder if the atomic explosions are responsible . . . especially since it was world-wide and included Europe and Asia.

Both the U.S. Atomic Energy Commission and the U.S. Weather Bureau have been keeping a close watch on this situation. Both report "no evidence that atomic blasts have affected the weather over an area even as large as a State."

A recent report in the U.S. News goes on to state: "Weather effects from an atom explosion are strictly temporary and local in nature. They are confined to the formation of the familiar mushroom cloud, and a temporary rush of wind that creates pressure waves that are measurable for hundreds of miles, but are not of a magnitude great enough to affect weather.

"The weather, nevertheless, remains largely a mystery. Some improvements have been made in weather-forecasting methods. There is a little more knowledge about upper air currents. But weather predictions are still inexact and often wrong. Most authorities agree that the science of meteorology is in its infancy."

Making Things Better.—Soon it will be time to think about those annual New Year's resolutions . . . which we make so easily and break even more so.

An earnest young Sunday School teacher, seeking to plant the spirit of kindness and charity in her tiny charges inquired: "Tell me, children, what is it that binds us together and makes us better than we are by nature?"

"I know," a little girl answered. "It's a girdle!"

BRIANT SANDO

What's Next IN THE TUNA INDUSTRY?

By EDWIN L. MORRIS
Director, Tuna Research Foundation
Long Beach, California

GREAT growth has been registered by the tuna industry during the 50 years of its existence. Yet it faces two major problems in addition to the normal hazards of a processing and merchandising business . . . two problems that are almost unique to it.

The first and most threatening is the rising flood of imports of both raw and canned tuna, principally from Japan.

For the five year pre-World War II period, the Japanese average take was approximately 15% of the America tuna market. Last year this figure had risen to 32% and the latest figures available this year stand at 35%.

We know that in addition to what has already been shipped there are tremendous inventories in Japan of both canned and frozen tuna, awaiting shipment to this country when the time is right.

The Japanese tuna folks right now are about like the little boy in the story, "just before Christmas I'm as good as I can be" . . . they are holding most of these inventories off the American market until they receive their "Christmas present"—full membership in the General Agreement on Tariffs and Trades, known as GATT, and a proposed Trade Agreement with this country to further reduce tariffs on tuna.

At the last meeting of the 34 subscribing nations to GATT, Japan was granted only a limited membership because of the strong protest of Great Britain. At a meeting of GATT held last month in Geneva, Switzerland, the United States government sponsored Japan's request for full membership. What does this mean? Simply that Japan on all her exports will receive the same concessions granted by all member nations of GATT to other member nations. On imports to this country it will have no meaning because the United States has long held to the policy of "the most favored nation." In other words, any concession granted by the United States in tariffs to any country, becomes immediately available to all countries outside the Red Curtain.

The First Big Problem

Immediately after Japan is granted membership in GATT, the United States proposes to negotiate a trade agreement with Japan for the purpose of reducing tariffs and other barriers to trade. We do not know, of course, what concessions will be granted. We do know however, that unless a quota or quantitative restriction is placed on imports of tuna into this country from Japan that a very severe blow will be dealt the American tuna industry.

We would like briefly to sketch just what has happened in the way of tariffs on tuna. Since 1934 the tariff on tuna canned in oil has been 45% ad valorem, which historically has proved to be about right, judging from its regulatory effect.

In 1943 in a trade agreement negotiated with Mexico, tariff on tuna in oil was reduced to 22½%. This represented no problem at that time; our clippers were off to war, our catch was extremely limited and there were no imports of consequence.

In June of 1950 Mexico cancelled her trade agreement with the United States for reasons not at all connected with tuna. Six months notice was required, so on January 1, 1951, the tariff on tuna canned in oil reverted to 45%. However, in that interim period between cancellation and the new rate becoming effective, an avalanche of tuna canned in oil came into this country from Japan to beat the new rate. This action dealt the domestic tuna industry a blow from which it took two years to recover.

Suddenly after the restoration of the tariff rate on tuna canned in oil to its former rate, a product new to commerce began to make its appearance in this country, also from Japan. It was tuna canned in brine, instead of the traditional salad oil. In 1943 concurrently with the negotiation with the Mexican trade agreement, the United States also concluded a trade agreement with Iceland, which through carelessness or error or oversight, threw tuna canned in substance other than oil into a basket category of canned fish and set a duty of 12½%.

The Japanese were quick to take advantage of this loop-hole and have been flooding the American market with tuna canned in brine since that period. Curiously enough, Iceland has never caught, processed, or con-

sumed tuna and has no interest in it. However, because of the "most favored nation" clause previously mentioned, Japan can export tuna canned in brine to this country at 12½% tariff instead of the 45% on the standard product canned in oil. It is as illogical as though our Customs Department and Tariff Commission set up a rate of 45% on black shoes and 12½% on tan.

The industry has exhausted all administrative channels of the government in order to equalize the rate between tuna canned in brine and tuna canned in oil. We have appealed to the Tariff Commission through the escape clause procedures set up in the trade agreements act to no avail. We are not taking the last recourse we know, which is to institute litigation in the Court of Customs calling for a re-classification of tuna canned in brine on the basis that it was not an article of commerce when the Icelandic Trade Agreement was negotiated and because we could not have negotiated a treaty covering tuna with Iceland which had no production of the product.

In the forthcoming trade agreement with Japan, the latter has specified tuna as one of the items on which they wish to negotiate for reduced tariffs. They have expanded their tuna industry out of all proportion to world demand and look only to the United States market since this is the only nation in the world that consumes canned tuna in large quantities.

Our industry has taken the position that if it is in the national interest to expand Japanese trade in order to maintain her within the orbit of free nations, that we will not object to tariff modifications provided a quota or some form of quantitative restriction accompanies any tariff revision.

We have gone so far as to say we will accept a quota based on Japan's current share of the domestic market . . . not an inflexible quota, but one that will permit the Japanese industry to grow hand in hand with ours as consumer acceptance and consumption of canned tuna increases in this country. These are the lines on which the proposed Trade Agreements battle have been drawn.

The Second Big Problem

In addition to the import problem we have a second hurdle, unique perhaps to our industry, and that is the issue of the breadth of territorial waters. A number of Latin and South American countries by unilateral action have extended their claims to territorial waters from the traditional three mile limit to over 200 miles, and one to 500 miles.

These claims of territoriality do not deal with the resources under the continental shelf alone but include also the waters over it. Our State Department has rejected these claims and filed protests with the claiming countries as a violation of international law which has historically prescribed the three mile limit.

Within the last month Ecuador, Chili and Peru, each of which has claimed a 200 mile limit, met and agreed to support each other's claim to this territoriality.

The impact upon our fishing fleet if they are successful in upholding this claim, would be immense. It would either drive us off the seas, force us to pay prohibitive license fees for the privilege of fishing in the high seas or drive our fleet to new fishing grounds. Needless to say we are protesting this action vigorously and are prodding our State Department to maintain the historical limits recognized by international law. So much for our problems. Now what of the future?

What About the Future?

In 1953 there were 11,200,000 cases of tuna sold in the United States, the biggest year in the history of the industry. Sales to date this year are approximately equal to this biggest year.

Put analysis against this half billion cans of tuna and it adds up to only about three cans per capita for the entire year. In other words, a can per person every four months. That shows the untapped potential of the canned tuna industry. A figure of 20 million cases does not seem too optimistic for accomplishment in the decade ahead.

What are we doing to insure that future? We are investing a generous portion of our gross sales for advertising and promotional activity to expand the market. We are also engaged in a tremendous amount of research activity, seeking to produce a better product at a better price to the consumer.

In the field of primary production, research is going forward to develop a synthetic or artificial bait. If and when this is accomplished it will mean a tremendous saving in procurement. It will result in a very much greater period of actual fishing time by our clippers. It will eliminate the necessity of high license fees and reduce operating expenses to a considerable degree.

Considerable research is underway to find and develop new commercial fishing grounds for tuna. For example, the Pacific-Oceanic Fisheries Investigation, a Fish and Wildlife Service project, based in Hawaii, has located new and commercially significant fishing grounds in the Equatorial region due south of the Hawaii Islands.

Research is currently going forward on finding and developing methods of catching albacore in the area some thousand miles north of the Hawaii Islands. The same type of research is going forward in the Gulf of Mexico and in the blue-fin fishing off the coast of Maine.

Canners are improving their techniques. Within the last three years automatic can filling has been installed in all canneries thus doing away with the tremendous expense of hand packing.

Research is being carried forward on cleaning of fish electronically, which also will reduce production costs. The industry has recently employed the Stanford Research Institute to make an objective study of the industry and its problems and to offer suggested solutions.

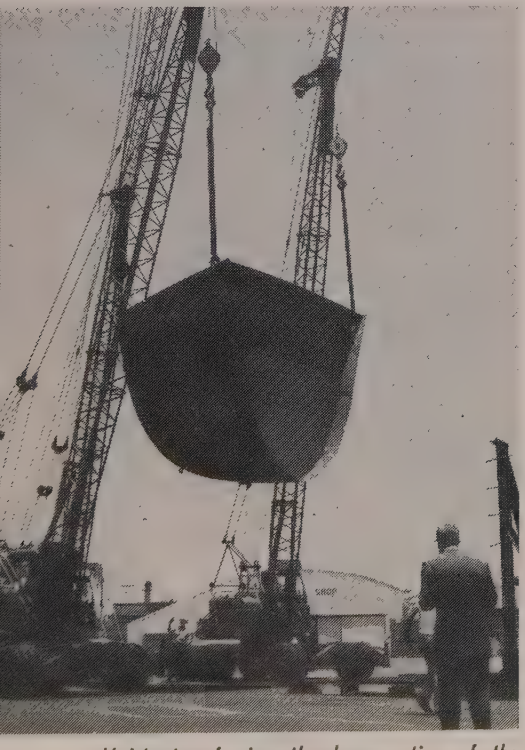
We are on the march. We know our merits. We also can see our faults, and we realize the great potential to be arrived at by California's fourth largest industry. We offer sustained effort and the willingness to cooperate. ★

By WENDELL H. CALKINS
Naval Architect

The CABRILLO *and the* DOMINATOR

TWO new additions to the San Diego tuna fleet are being built by the National Steel and Shipbuilding Corporation, San Diego, Calif., for Joseph and George Soares, of San Diego. The vessels, designed by the builder, are based upon the builder's standard 340-ton design and are similar in many respects to the "Sea Preme" and "Conte Bianco," which were previously built by National Steel.

In any type of design there are always conflicting requirements. In the case of the tuna clipper, fishing operations require a low deck at the stern (almost awash), large volumes of water above and below deck, and a capacity of deck space around the stern sufficient for loading 20 to 25 tons of freshly caught fish.



Hoists transferring the bow section of the Cabrillo in National Steel's yards.

These requirements create a reduction of stability and reserve bouyancy to the extent that extremely thorough and careful engineering is necessary to avoid producing a dangerously cranky and unstable vessel. Naturally, therefore, this was a prime design consideration for the new clippers.

Primary Design Considerations

These vessels have sufficient beam and void flotation space in the stern and shaft alley to give flotation and stability. This is further enhanced by the rapid rise of the deck line forward of the bait box to give more freeboard amidships. The full watertight transverse bulkhead at the aft end of the galley also contributes immeasurably to stability by eliminating the side alleys with low freeboard and the dangerous wing doors.

With the increase in distances traveled to reach tuna has come a need for increased hull and propulsive efficiency in order to offset the heavy fuel carrying requirements and the long time required for traveling to and from the fishing grounds. The Nassco standard 340-ton class hull was scientifically developed and thoroughly tested in the University of Michigan model test basin so that it would be able to perform its service with the best efficiency.

One of the principal objections to steel tuna clippers, which has been voiced in the past by proponents of wood construction, was the probability of a short life, as compared to wood construction, resulting from the ravages of corrosion.

Since the majority of other vessels of this size, and larger, are built of steel without suffering from short life spans or excessive maintenance costs, it follows that corrosion can be effectively handled. Naturally, this has always been a paramount consideration at National Steel, and great pains are taken to incorporate an in-built, natural resistance to corrosion into all details of design. The success of the methods employed has been well demonstrated by previous National Steel built vessels.

Handiness for operation, convenience and comfort for long periods of living aboard are factors whose importance looms high in the eyes of the crews and skippers, and certainly have a great bearing on the morale and quality of the crews. This in turn greatly affects the earning power of a vessel. Although such qualities are developed by operational experience in any type of vessel, there is always room for improvement.

In these vessels much thought was given to the arrangement, and particularly, to the design of the cabins and galley in order to give improved livability and comfort. The long experience in fishing of the owners

TWO NEW TUNA CLIPPERS

ADDED TO THE SAN DIEGO FLEET

was extremely valuable in this respect and was drawn upon by the designers wherever possible.

Principal Dimensions

Length, overall	127'-0"
Beam, moulded	30'-6"
Depth, moulded	14'-6"
Maximum Draft Aft, loaded	15'-8"
Displacement, loaded	765 tons

Capacities

Fish, Bait and Brine Wells under deck	291 Fish Tons
Bait Boxes above deck	50 Fish Tons
Total Fish Capacity	341 Fish Tons
Fuel Oil	47,191 Gallons
Lube Oil	1,600 Gallons
Fresh Water	4,000 Gallons

Arrangement Features

Although the general layout and arrangements are conventional, some improved features are worthy of note. As may be seen on the accompanying general arrangement plans, the bulkhead at the aft end of the galley on the main deck extends clear across the ship and is fully watertight. A watertight door in this bulkhead gives access to the engine room through a passage just to starboard of the centerline of the ship.

The prime advantage of this arrangement lies in the considerable gain in stability. This gain results from the elimination of the two long side alleys, with their relatively low freeboard, and the two wing doors to the engine room.

Vessels with such doors are quite vulnerable to flooding through the doors if the vessel is inclined beyond 20 degrees. Without such doors safe inclinations up to 60 degrees are possible. Another advantage is that with only one passageway forward instead of two there is a gain in useful interior space.

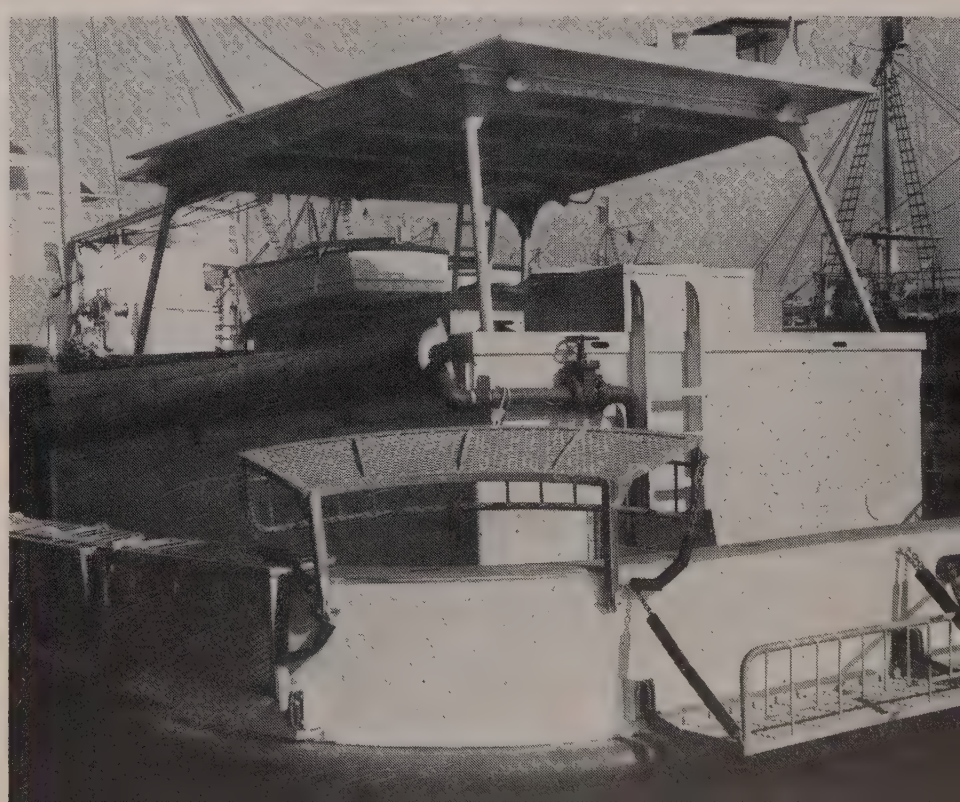
In the galley space, to the port of the passage, the gallery working area is separated from the mess table area by a serving bar with a dresser top and meat block below it. This arrangement provides adequate lockers, drawers and worktop areas with limited wall space but without dividing the space into two separate rooms.

This permits a free flow of air clear across the space. A powerful blower, located up above in the fan room just aft of the chart room, pulls 1,850 cubic feet of air per minute from the shaded cool area aft of the galley, through the 16 inch portlights in the watertight bulkhead, and across the galley space to the vent intake located over the galley range. This provides a complete air change in the galley every minute and is expected to produce an unusually cool galley.

The ventilation of other areas also came in for special study and improvement. In ventilating the engine room, the principle was followed that, in addition to supplying fresh air, it is necessary to remove excess heat which has been added to the air by the machinery.

(Continued on next page)

View from port quarter showing fishing racks and fish chute and canopy.



Workmen at National Steel plant checking the hoisting of the main engine, a Model DMG-38 Enterprise Diesel, for installation on the Cabrillo.

Two New Clippers

(Continued from page 13)

To accomplish this a powerful exhaust blower is installed in the fan room on the bridge deck. This fan draws air up from the engine room through the stack casing and exhausts it through the aft end of the fan room. Fresh air is supplied by a 10,000 cubic foot per minute axial fan located in the net room.

There are six brine wells on each side of the shaft alley. All but the last two aft have regular 24 inch high insulated coamings. Bait is carried in all but the two wells furthest forward. Fuel may be carried in the two wells furthest forward and in the two furthest aft.

Since the two forward wells are completely beneath the galley and passage area, access to them is provided by a sloping chute leading from the hatch on deck to the upper part of the well. This arrangement has previously been used with success by National Steel.

The layout of the deck houses is conventional except for the treatment of toilet and washroom spaces. As may be seen on the accompanying plan of the raised deck level, the toilet facilities are all in one space on the starboard side and the shower and washing facilities are located separately in a space on the port side. This layout provides more privacy and permits more of the facilities to be used at the same time.

On the raised deck aft two motor tenders and two skiffs are mounted on chocks with space left for two fully assembled bait receivers. The boats and one of the receivers are all located on a common radius from the mast so that the elevation of the boom does not have to be changed for making the various lifts. The mast and boom are fabricated of welded steel and have a three-ton capacity.

The boom is extended to give sufficient length for hoisting an airplane off the bait canopy, if required. Stainless steel wire rope is used for standing rigging. The usual ratlines are omitted and the top of the mast is reached by steel rungs welded to each side of the mast.

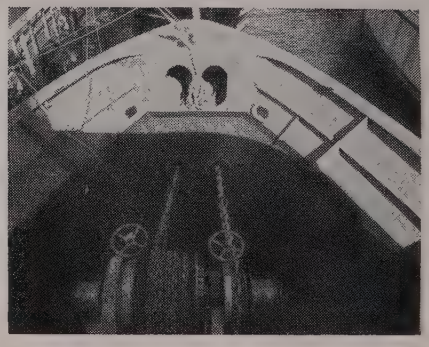
The crow's nest and radar antenna are mounted on a steel tripod atop the pilot house. With this arrangement the occupant of the crow's nest escapes the engine exhaust fumes to which he would be exposed if the crow's nest were mounted on the mast.

Hull Construction Features

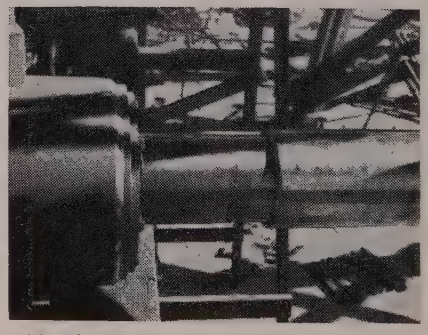
The all-welded steel hull features longitudinal framing similar to that used in large tankers. This type of framing is a "natural" for any vessel which has a large number of relatively closely spaced transverse bulkheads. The scantlings, structural details and welding are in general conformance with ABS requirements. All welding is done by welders who have passed qualification tests and have been certified by the U.S. Navy.

An unusual feature for a steel vessel is the deep box keel which extends below the hull in a fashion similar to wooden vessels. This keel dampens rolling and aids steering in following seas. At the stern the box section keel is extended to form a strong and rigid rudder shoe.

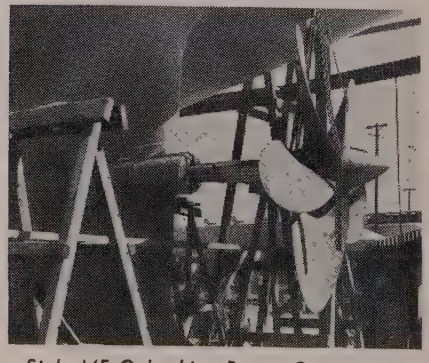
The sternpost is fabricated of plate and is well streamlined and faired into the hull. A band of extra heavy shellplate on each side extends from the turn of the bilge down to the keel to give strength and rigidity to the entire skeg assembly.



Forward deck showing anchor windlass and ground tackle.



Monel tailshaft and stuffingbox on the Cabrillo.

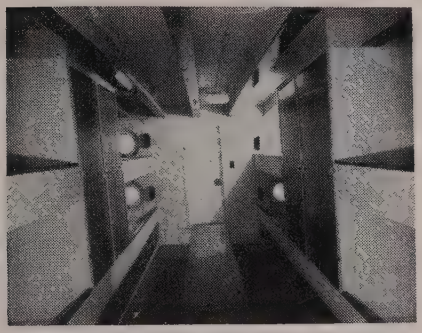


Style ME Columbian Bronze Corporation Propeller.

Considerable study was given to the design of the rudder in order to provide good steering in a following sea. It was believed that, if a rudder could be developed which gave the required turning effect at a smaller rudder angle, much less effort and spinning of the steering wheel would be required to hold a true course.

Consequently, after an investigation of recent scientific work on the steering of ships and on the subject of airfoils, a new airfoil section was selected which appeared to have the desired characteristics. The new rudder is considerably thicker and has a maximum thickness further aft than usual. There is also a pronounced hollow to the section near the trailing edge.

Pilothouse interior with Sperry Triple steerer—magnetic compass and binacle Enterprise engine control stand to the port of the Steerer. On aft bulkhead is a recording fathometer—intercommunication panel—lighting panel.



Eight man crew space on raised deck in forward part of house.

Aft end of shaft alley looking aft to Sperry hydro-electric steering unit.

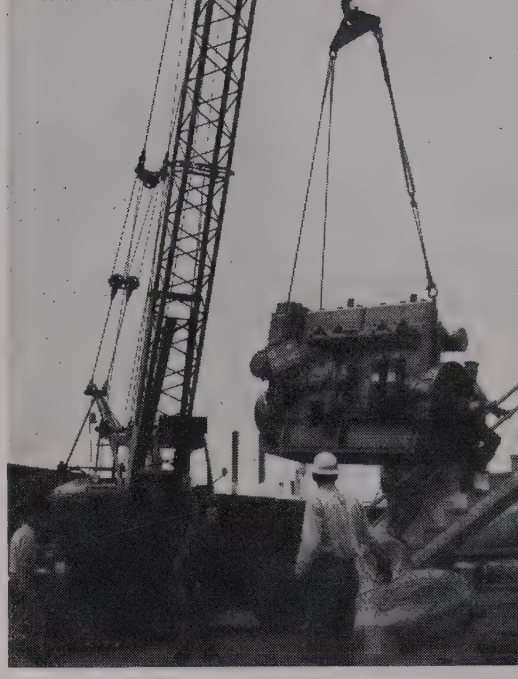
During the construction of the hull, great care was exercised to prepare surfaces properly for the anti-corrosive coatings. All millscale, dirt, and slag on welds was thoroughly removed by sandblasting. This preparation and the actual application of the coatings is materially aided by the builder's practice of constructing the hull in planned sub-assemblies.

This enables the painters and sandblasters to reach surfaces which later became inaccessible when the complete hull is assembled. "Amercoat" Vinyl Plastic paints are used exclusively for steel protection. Certain areas, subject to abrasion such as the inside of the bulwarks, are given a zinc spray coating prior to painting.

Machinery and Piping

Propulsion is provided by a Model DMG-38 Enterprise Diesel Engine rated at 950 Brake Horsepower at 450 revolutions per minute. This engine is an eight-cylinder, 12″ x 15″, turbo-charged model which is very popular in the tuna fleet. A 2:1 ratio reduction gear, made by Universal Gear Corporation, is coupled to the engine via a flexible coupling made by the Thomas Flexible Coupling Company.

Propeller shafting is 6½″ diameter with the tail shaft section made of Monel for high resistance to corrosion. A five-blade, 90″ x 74″ style M.E. propeller was furnished by the Columbian Bronze Corporation. Line shafting is supported by National



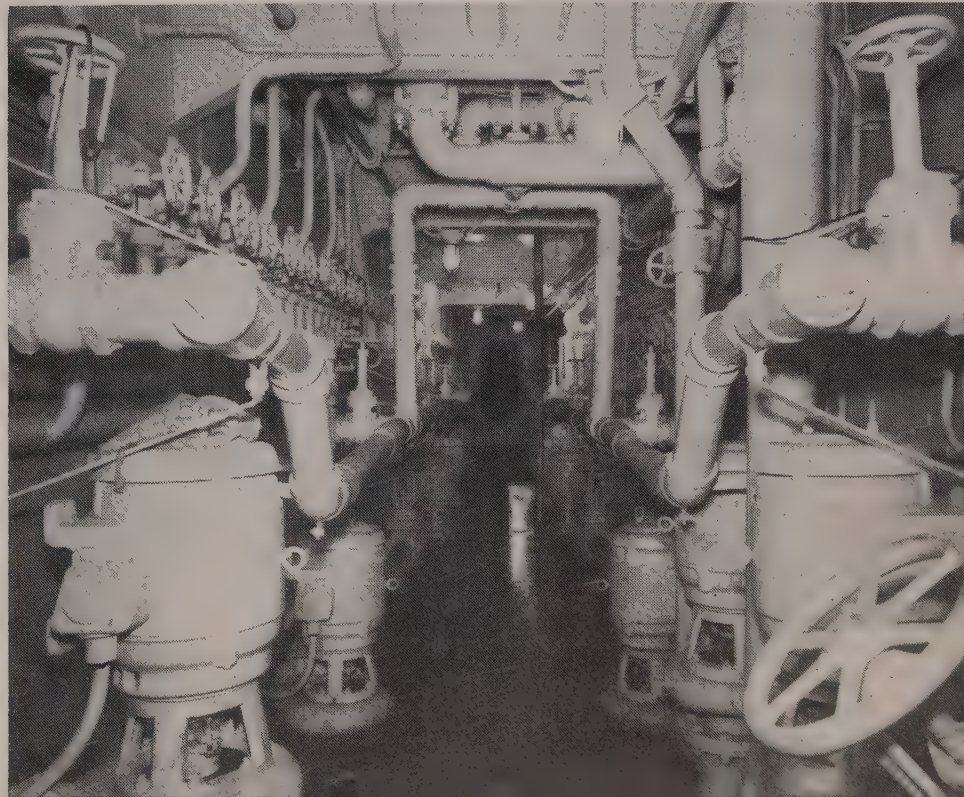
One of two Pacific Diesel auxiliary engines on hoist preparatory to installation in the engineroom of the Cabrillo.

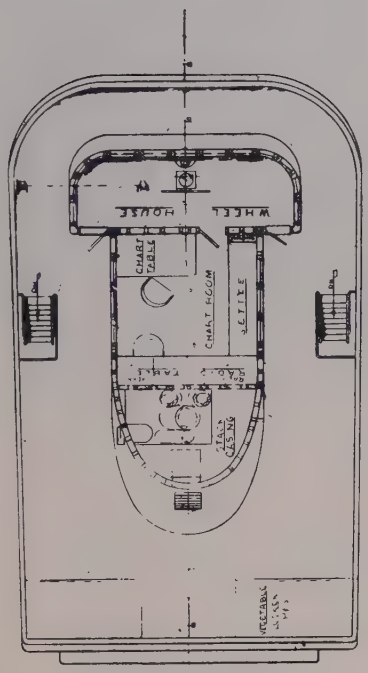
Steel Standard Ring Oiled shaft bearings. A Goodrich Cutlass rubber bearing is used for the outboard bearing in the sterntube.

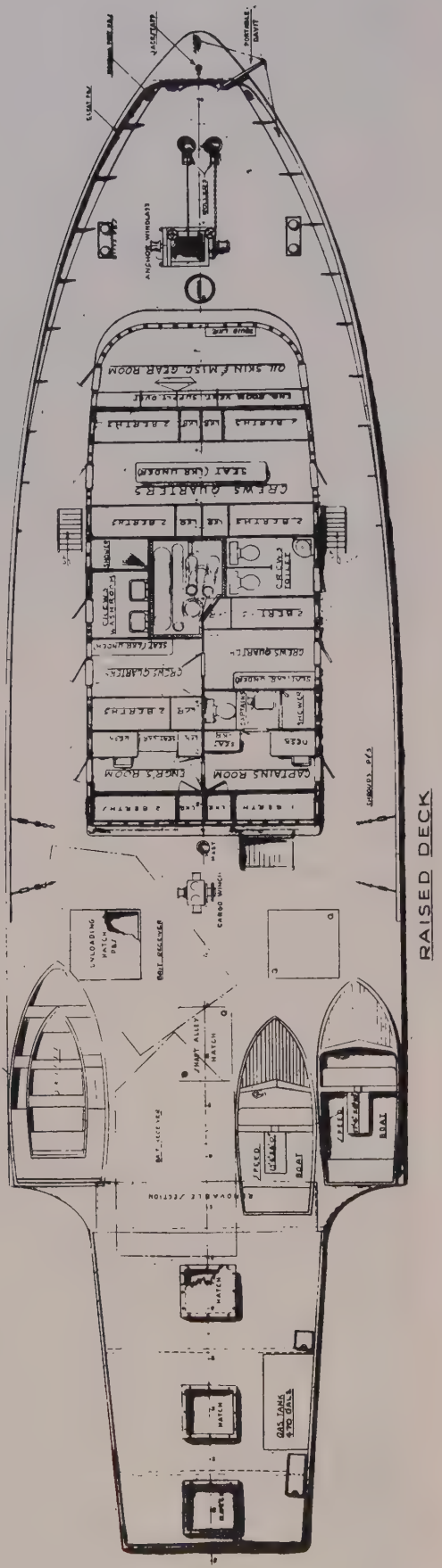
Ample electric power is furnished by the two 150 k.w., 220 volt, Pacific Diesel generating sets furnished by the J. T. Siler Company, of Palo Verdes. The main switchboard was built by Ets-Hokin and Galvin Company, in San Diego, to National Steel's design. The electric system is

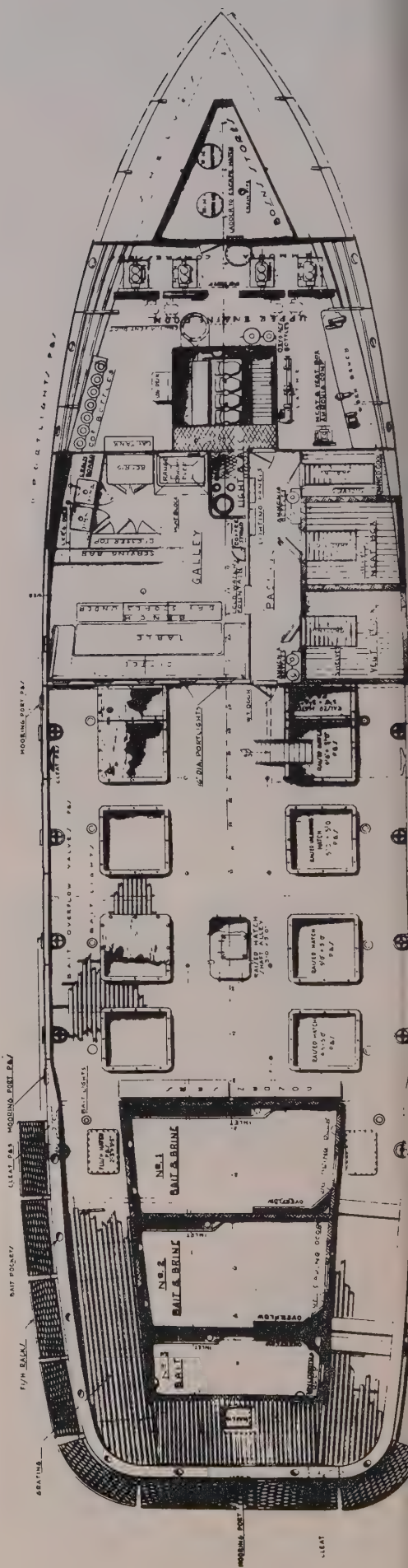
(Continued on page 18)

Shaft alley looking forward. Individual bait and brine pumps for each well are located on either side.



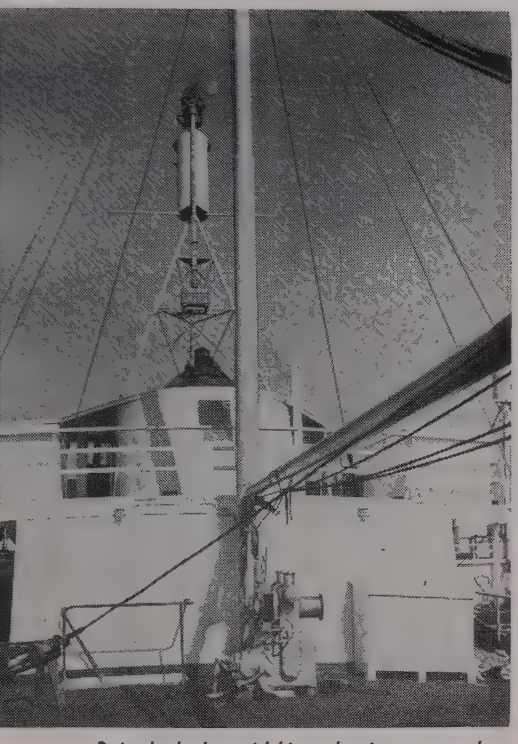






Construction Details of the Two New Boats

The CABRILLO and the DOMINATOR Both Have the Same Specifications



Raised deck amidships showing cargo handling gear.

Two New Clippers

(Continued from page 15)

entirely AC with 220 volts for power supply and 115 volts for lighting and ship's service supply.

For the brine refrigeration system, four 6″ x 6″ Worthington ammonia compressors are used, each with a capacity of 27.6 refrigeration tons. Each compressor is belt driven by a 30 h.p. Westinghouse motor. A 3″ x 3″ Worthington ammonia compressor, also driven by a Westinghouse motor, is used for the refrigeration of the galley meat and vegetable storerooms.

For brine and bait water circulating, the National Steel system of individual dual-purpose pumps at each well is used. A total of 15—4″ x 5″ vertical 7½ h.p. Fairbanks-Morse centrifugal pumps are used for bait and brine pumping.

While the greatest portion of salt water piping is welded steel, galvanized, a new type of plastic pipe, manufactured by Kraloy Plastics, Inc., was used for the brine transfer line, main ballast lines and for salt water cooling to the ammonia compressors. Service results of this type of pipe will be observed with great interest since the advantages appear to be manifold. Plastic pipe is much lighter in weight and easier to install than steel and, being non-metallic, does not suffer from corrosion.

Other engine room equipment includes the following:

Air Compressors — Worthington, Two-Stage, 24.3 c.f.m.

Sanitary Pumps — Fairbanks-Morse, 240 g.p.m.

Bilge Pump — Fairbanks-Morse, 3″ x 4″, vertical, centrifugal

Fire Pump — Fairbanks-Morse, 2″ x 3″, vertical, centrifugal

Condenser Circulating Pump — Fairbanks- Morse, 4″ x 5″, vertical, centrifugal

Fuel Oil Transfer Pump — Fairbanks-Morse, 100 g.p.m.

Lube Oil Transfer Pump—Harmon Rotary

Lube Oil Filter—Winslow No. 21-1645

Fuel Oil Decontaminator — Aircraft Fueling Corp., Model 101

Engine Room CO2 System—700 pounds, Furnished by CO-TWO Fire Equipment Co.

(Continued on next page)

Stern section of the Cabrillo in jigs is being lined up for welding to the center hull section.

National Steel's sub-assembly construction is shown here with the stern, center and bow section about to be butted together for welding.

Raised deck looking aft to bait box and canopy. Space is available on this deck for two completely assembled bait receivers in addition to the boats and skiffs.

Deck Machinery and Outfitting

Steering is accomplished by a complete Sperry-Gyro system which provides power steering, automatic steering and manual steering with a Sperry Triple Steering stand in the pilot house. The Gyro Compass is located in the engine room as near to the center of motion as possible. The Sperry Hydro-Electric Steering Engine is located in the stern and is connected, by a chain drive, to the National Steel Standard 4 inch worm steering unit which is mounted on the upper end of the rudder stock.

Remote power steering may also be done from the port bridge wing using a simple lever-type, non-follow-up controller in conjunction with a rudder angle indicator. Engine controls in the pilot house and on the bridge wing are the standard Enterprise Direct Mechanical Type.

The interior of the galley and cabins is finished in attractive colors, using Zolatone paints, with varnished mahogany trim. Magnesite, installed by the Astra Flooring Company, of San Diego, is used in the galley, washroom, toilet spaces and in the galley meat and vegetable storerooms. Armstrong linoleum, furnished by Astra Flooring Company, is used in the cabins and chart room.

In the galley an Ingle Diesel Oil Range, manufactured by National Steel, is installed adjacent to the exhaust tank. A 20 cubic foot restaurant-type refrigerator, furnished by Wright Refrigeration Company, of San Diego, is used as a galley day box.

A "Northern Cargo Winch," built by the Tacoma Boat Building Company, furnishes the power for hoisting the two Driscoll Power Boats, the Boyce-Built net skiffs and the two bait receivers. A "Northern" combination chain and wire rope anchor windlass is mounted forward. The wire rope reel on the windlass will accommodate a 1,350-foot cable for deep water anchoring. Two 1,000-pound Navy-Type anchors, furnished by C. J. Hendry Company, of San Diego, are stowed in the hawse pipes.

Two radio transmitters, built by the McBride Radio Equipment Company, of San Diego, are located in the chart room. One is a 500-watt unit and the other is a 100-watt unit to be used for ship-to-ship conversation. A Navy SO-8 Type radar unit is also installed in the chart room. A Raytheon recording type fathometer, conveniently located in the wheel house, rounds out the list of first class navigating equipment.

The owners and builders of the "Cabrillo" and the "Dominator" are justly proud of the job and feel that they represent a step forward in the development of the tuna clipper type. *

Luxury Craft Converted to Fishing

Australia's largest crayfishing and and processing boat, the 112 foot *Norah*, left Sydney recently on her first fishing trip after being fitted with an extensive refrigeration system and facilities for processing.

The *Norah* was built at San Diego, California, for Baron Long, former owner of the Biltmore Hotel in Los Angeles. She was used for a short time during World War II as General MacArthur's ship, and later by the Royal Australian Navy as a hospital ship.

In her original condition the *Norah* (then the *Baron*) had 11 staterooms, each with tiled bathroom, and hot and cold running water. Some of these have been retained, but in the re-building provision has been made for 800 cubic feet of freeze space, and 2,000 cubic feet of refrigerated storage.

The *Norah* is powered by a 200 h.p. diesel, and has two auxiliary diesels of 30 h.p. and 25 h.p. respectively. She is equipped with an echo sounder having a range of 60 fathoms, and her full tanks give her a range of 5,000 miles. Her first fishing trip was for the Sydney company of M. L. Hopkinson & Co.

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Black, white, mahogany, gray - waterproof
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White, black, mahogany. Rubber base. Waterproof
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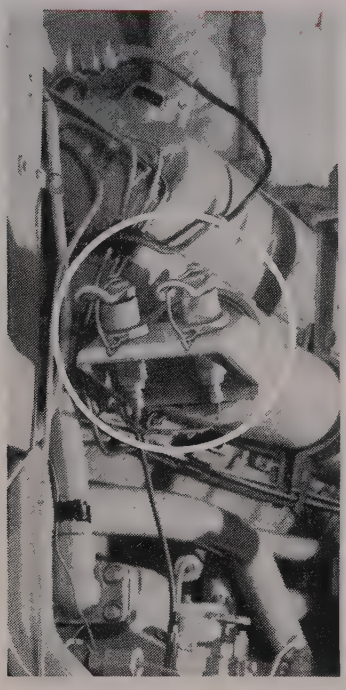
Standard Engineer's Report

CASE HISTORY
PRODUCT Chevron Pressure Primer System
INSTALLATION U.S.S. Endurance

Aluminum diesels use primer system for fast starts



CHEVRON PRESSURE PRIMER SYSTEMS are installed on all 6 Packard aluminum-alloy V-12 diesels in the Navy's new anti-magnetic mine-sweeper, the U.S.S. Endurance. Each primer system includes a discharger (two are circled, above) which releases Chevron Priming Fuel from a pressurized bulb. Under 250 pounds pressure, the fuel sprays through an atomizing nozzle into the intake manifold.

DEVELOPED FOR THE ARMED FORCES, the Chevron Pressure Primer System alleviates hard-starting troubles on all diesel and gasoline engines. Chevron Priming Fuel is so effective it has started big diesels in less than 10 seconds at 50 below zero, gasoline engines at 65 below! The steel bulbs and enclosed system give complete safety of handling and storage.

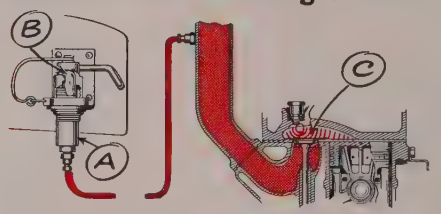
FREE FOLDER tells you more about Chevron Pressure Primer System and how to install it on different engines. Write or ask for it today.

FOR EXPERT HELP on lubrication or fuel problems, call your Standard Fuel and Lubricant Engineer or Representative; or write to 225 Bush St., San Francisco.

CHEVRON

TRADEMARK "CHEVRON" REG. U. S. PAT. OFF.

How the Chevron Pressure Primer System alleviates hard-starting troubles



A. Simple, rugged, safe discharger prevents fuel leakage; can be mounted on instrument panel for one-man starting.

B. Small, strong steel bulbs protect fuel from water and dirt; when discharged, fuel injected under pressure results in fine spray and immediate starts.

C. Volatile Chevron Priming Fuel atomizes in the induction system at temperatures as low as -65 F. Pressure or weakest spark fires mixture, starts engine. Engines can be started with low compression pressures and weak ignition.

STANDARD OIL COMPANY OF CALIFORNIA

ON THE TWO NEW BOATS ... Anti-Corrosion Planning

AMONG other advanced features, the new Dominator and the Cabrillo probably are the most corrosion resistant tuna vessels ever launched.

Most clippers are hard hit by corrosion. Operating for long intervals in rough exposures without benefit of the maintenance at sea given other types of vessels, the tuna boat often shows rapid deterioration.

Consequently the boat owners and the builders took steps to remove corrosion's threat from these new vessels right from the start. The Soares brothers, among the first to use such modern devices as radar, depth sounders, and planes for spotting schools, naturally sought another "first" in improved coating methods.

During construction of the Cabrillo and Dominator, two coating factors were outstanding. First was the care with which individual coatings were selected for various areas of the vessels; second was the strict use of the best possible surface preparation methods. In working out coating techniques, the experience of National Steel and Shipbuilding Corporation was backed up by consultations with Amercoat Corporation, a firm skilled in solving industrial and marine corrosion problems.

Starting with the hull exteriors, it was decided to sandblast for best surface preparation. The entire area below the water line then received four coats of an Amercoat anti-corrosion coating, followed by two coats of No. 130 Amercoat anti-fouling. This system was chosen as one which would offer the most protection under constant salt water immersion. Above the water line, the hulls were first primed with a newly developed inhibitive primer, and then given three and four coat applications of the same corrosion resistant vinyl coating used on the areas below the water line. In instances where a glossy finish was desired, the vinyl coats above the water line were given top coats of conventional white marine enamel; but the first consideration was to provide adequate corrosion resistance.

An area receiving close attention was the inside of the shell plating which forms the hull interior. In common practice these surfaces are given a superficial coating of prime; then all electrical work, piping, and fitting is completed. After this, a conventional paint is applied overall but obstructions make surfaces hard to coat and so rusting and paint failure soon occur. Even a re-coating job seldom stops corrosion.

On the Cabrillo and the Dominator these interior surfaces received a new inhibitive primer, and then top coats of protective vinyl coating prior to fitting out. This protected the surfaces so that corrosion will have a tough time establishing itself as it does on most clipper interiors.

In all, this coating job probably represents the most thorough corrosion protection ever given a tuna clipper. The result should be a minimum of future maintenance as the Cabrillo and the Dominator put to sea in quest of the big fish. ★

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Inter-Trop No. 50's toxic qualities have been tested in arctic and equatorial waters alike with this result: High resistance to every type of fouling growth and worms. Easy to apply because formulated with a full body; and Inter-Trop is economical because it is laboratory-engineered for long life.
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The San Diego Waterfront

By ROBERT K. LAWSON

SPOKESMEN for six San Diego shipyards joined hands with fishermen last month in protest against "the rising imports of tuna from Japan" before members of the congressional subcommittee of merchant marine and fisheries investigating West Coast shipbuilding facilities.

At a luncheon in their honor, by the San Diego Harbor Commission, at the Kona Kai Club, Representatives William S. Mailliard and John J. Allen, Jr., both Republicans of California, heard how the shipyards were suffering as a direct result of the high imports.

It was also brought out that without a sound and healthy tuna fleet the yards could not operate efficiently and steadily with sufficient strength to make them available in time of national emergency.

Spread the Burden Around

C. Arnholt Smith, president of National Steel & Shipbuilding Corporation said that "Help for Japan should not be confined to burden the tuna industry alone. It should be spread around among other industries."

Less imports, Smith maintained, would eliminate excessive inventories at local canneries which, he declared, are the cause of the present tie-up of some 50-odd tuna vessels in the San Diego tuna fleet with fish in their holds today.

John J. Martinolich, vice-president of the Martinolich Shipbuilding Corporation, said that, "The future security of San Diego shipyards depends upon a strong and active tuna fishing fleet," and he emphasized that "anything done to keep the fleet busy, healthy, and prosperous, will benefit the shipyards now and in time of need."

The committee heard similar statements by spokesmen for the Harbor Boat & Yacht Company, San Diego Marine Construction, Campbell Machine Company, and the Kettenburg Boat Works.

Dr. Wilbert M. Chapman, director of research of the American Tunaboat Association, pointed out that the American tuna fleet had shrunk some 25% in the past four years.

In 1951, Dr. Chapman said, the fleet was comprised of some 214 vessels as compared to the present strength of 163. Chapman said, "The reason these vessels have not been replaced is due in part to the uncertainty of foreign imports. The lack of new boat construction has a direct bearing upon the welfare of the shipyards. Whether or not the shipyards are prosperous depends on the state of the tuna fleet."

An Ad Club Talk

Across the city from another quarter came the viewpoint of the Tuna Research Foundation, through its executive director, Edwin L. Morris, in an address before the San Diego Advertising & Sales Club, at a luncheon in the U. S. Grant Hotel, marking the opening of National Tuna Week.

Morris brought out the fact that the jobs of some 18,000 Southern California workers are threatened by the high import situation and lack of action for either tariff or quotas to control this situation.

"The Japanese held a 13% hold on the American market prior to World War II. That figure stands today at 35%. Another serious phase of the situation is the fact that today there are tremendous inventories in Japan of both canned and frozen tuna awaiting shipment to the United States when the right time comes."

From Another Corner

Meanwhile in another corner of the world the red-hot battle over territorial water rights continues. Ecuador, Chile, and Peru have flatly gone on record for a territorial water limit of 200 miles at sea. The general attitude on this situation is one of defiance by the American tuna fleet operators.

The situation is marked, periodically, with explosions as a result of seizures of American vessels in the claimed waters of those countries, and subsequent excessive fines levied against the owners of these vessels.

Along with the United States, most of the rest of the fishing world has asked the United Nations to settle this long and bitter dispute. This appeal brought a quick response from Chile, Peru, and Ecuador stating the matter was not one for consideration by the U.N.

This statement came as no particular surprise to U.S. officials. When asked if there was something that could be done to forestall the anticipated further seizures, it was agreed that economic sanctions against the three Latin American countries would have a marked effect. but the United States was not ready to adopt such drastic measures at this time.

Other Fishing Grounds

Over at Scripps Institution of Oceanography, La Jolla, the Fifth Annual meeting of the Pacific Tuna Conference, revealed an 1,800-mile-long belt of unexploited tuna within cruising range of San Diego based vessels.

The tuna were described as 1,200 miles south of Hawaii, in a 400-mile-wide strip paralleling the equator. Two San Diego tuna clippers made trips to the area and returned with successful results. Because of the peculiar feeding habits of these tuna, they do not school and can be caught only by hand-lining.

The distance to these fishing grounds was described as about the same as that of the Galapagos Islands, the current fishing grounds under dispute with South American countries.

Oscar E. Sette, director of Pacific Oceanic Fishery Investigations, at Honolulu, revealed that considerable work has been done by three research vessels in conjunction with the Fish and Wildlife Service to explore various methods of catching these tuna.

The meeting was attended by representatives of and research experts from Canada, Oregon, Washington, California and Hawaii. Bell Shimada, of the Inter-American Tropical Tuna Commission, was conference chairman. No statement from the Southern California tuna fishing industry was available as to whether or not the new grounds will provide ammunition for the big battle below the equator. ✦

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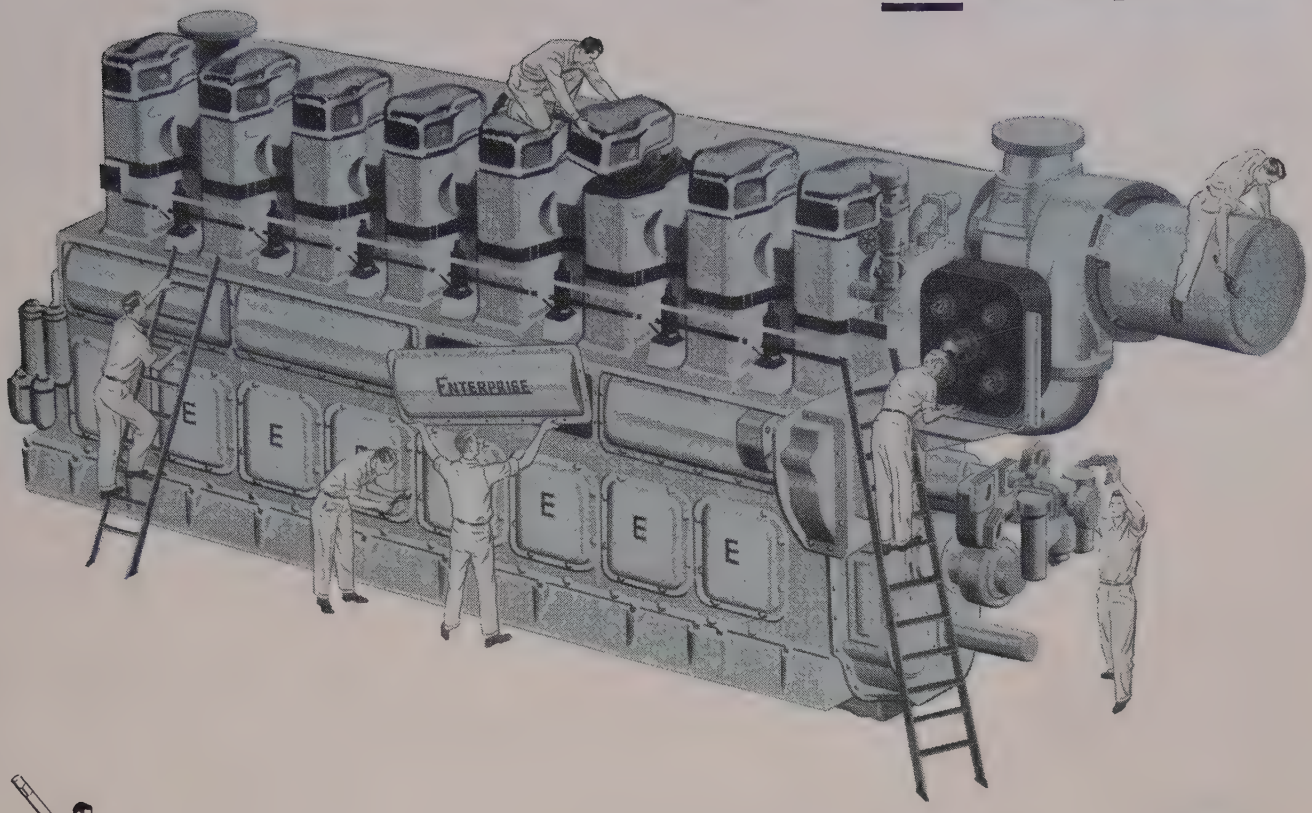

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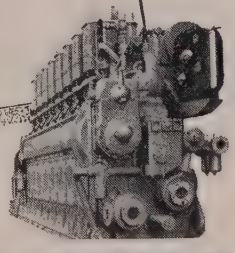

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Sardine Landings Up

Southern California sardine landings have climbed over 10,000 tons since the southern season opened October 1, or more than the state total of 3,500 during the 1953-1954 season, according to the Department of Fish and Game.

Age determinations and length measurements of fish taken indicate that the upsurge in the catch has resulted from a migration from Baja, California, and not from recruitment of new and younger sardines to the fishery.

There also are indications that numbers of sardines off Baja, California, have declined at the same time southern California numbers have increased.

Department officials pointed out that there now are more sardines in the southern California fishing grounds than during the past two seasons, and that the present catch would have been greater had not price disagreements kept the fleet in port some of the season.

A forecast of the seasonal catch cannot be made at this time, but sardine interests are looking up and there is more optimism than for several years.

U. S. Imports and Exports

Imports of groundfish fillets, tuna, and tunalike fish, shrimp and fish meal during the first seven months of 1954 were substantially above those of the comparable period of 1953, according to a comparison of imports of fishery products compiled by the Fish and Wildlife Service from data collected by the Bureau of Census.

Sardines, not in oil, were up 22%; canned salmon, 31%; shrimp, 7%; frozen tuna, 18%; and canned tuna and bonito each up about 33%.

United States exports of canned salmon and fish oils were above those of the January-July period of 1953 but canned mackerel and sardine exports showed declines from the seven month exports of 1953.

Mason Case at San Pedro Co-op

Mason Case has become assistant manager of the Fishermen's Co-operative Association in San Pedro. John Real, manager for some years, expects to retire one of these days to re-enter his first love, the legal profession.

"Peepers" on Tuna Week

National Tuna Week got a boost along with macaroni on a "Mister Peepers" program, seen by an estimated 20 million viewers of NBC-Television. Helen Lewis, who does commercials on the program dealing with the life and times of high school science teacher Robinson J. Peepers, exhibited a tuna-macaroni loaf and urged:

"Celebrate Tuna Week with a delicious, nutritious, economical tuna-macaroni loaf that's easy to make."

She explained that preparing the loaf was easy by lining the baking dish with Reynolds Wrap, making the loaf easier to remove and keeping the baking dish clean.

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ness. (3) Fishermen be covered by signed working agreements, either collective or individual. (4) Accident insurance, either private or State, be provided both employed and self-employed fishermen."

Lokken told NFI that the meeting agreed on all points except the one covering medical certificates. He said: "In this the delegates of both workers and employers from the United States opposed medical certificates for the fishermen as unnecessary and of no value to the American fishing industry."

The recommendations, Lokken explains, now go to the governing body of the International Labor Organization and later to the I.L.O. Conference for review. It likely will take at least three years before any of the first three subjects will become "effective as international instruments," says Lokken. It will take longer for the fourth point, accident insurance, to become effective.

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SYMPATHETIC COMMITTEEMEN.--Washington expects the new Democratic congressmen who very likely will head up Senate and House committees considering fish legislation to be men who know the fishing industry and are sympathetic to its cause.

In the Senate, word is that Senator Warren G. Magnuson of Washington will "chair" the Senate Interstate and Foreign Commerce Committee. In the house, North Carolina's Representative Herbert C. Bonner will head up the Committee on Merchant Marine and Fisheries. Both men have considerable knowledge of fisheries, Magnuson on the Pacific Coast, Bonner on the Atlantic--a good balance of interests.

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BONNER POINT OF VIEW.--Rep. Bonner recently had some enlightening words to say on the controversial 200-mile territorial waters recently proclaimed by Peru. While on a visit to South America, Bonner told an interviewer for the newspaper La Prensa:

"Actually the so-called 'Truman Declaration' has been misinterpreted in regard to having asserted the 'control and jurisdiction' of the United States over maritime wealth to an extension of 200 miles off its coasts, and as having coupled this declaration with a proclamation of 'sovereignty' over so-called 'territorial waters' of equal extent."

Bonner said that the Truman Declaration only established the jurisdiction of the United States over the subsoil petroleum deposits under the sea to a depth of 200 meters, but has no relation to the rights of navigation or of fisheries.

"The most appropriate way to solve problems resulting from the indiscriminate hunting and fishing which is being carried out in the seas," Bonner declared, "is through conferences and agreements which will establish international standards and sanctions in the interest of the conservation of fishing resources and will recognize the rights of nations to the marine resources which they have traditionally exploited and which are necessary to their economies. This has been the policy of the United States in the case of the Newfoundland Fisheries, situated between Canada and the United States."

ROBINSON-PATMAN.--The government is stepping up its crack-down on violators of the Robinson-Patman Act. The Act says brokerage, discount or other price "discrimination" either collected by the buyer or paid by the seller is illegal unless it is available to all.

The reasons for the crack-down include: Complaints from business against competitors who charge the law is frequently being violated . . . a big backlog of cases, reportedly owing to changes in Federal Trade Commission personnel . . .and last session's congressional scolding of FTC for apparent "feet-dragging."

November election results generally are seen as being favorable to friends of the Robinson-Patman Act. New chairmen of these committees, dealing with the Act, are considered its champions. They are: Senator Harley M. Kilgore, of West Virginia, who heads up the Senate Judiciary Committee: Senator Magnuson of Washington, boss of the Interstate and Foreign Commerce Committee; and in the House, Rep. J. Percy Priest, of Tennessee, who heads up the House Interstate Commerce Commission.

There is one exception to the general leaning toward a strong R-P Act in Congress. And that is in the House Judiciary Committee, headed next session by New York Rep. Emmanuel Cellar. Cellar, in the past, has supported amendments to the Act which its advocates believe would weaken it.

A big fight over the Robinson-Patman Act is shaping up. Rep. Wright Patman of Texas already has a bill worked up to block "weakening" of the Act--and to stiffen present provisions. Critics of R-P want changes to allow "price discrimination" and brokerage concessions when necessary "in good faith" to meet competition.

Note: In a report due soon from the Justice Department, Attorney General Brownell is expected by insiders to recommend repeal of fair trade laws--including revisions of Robinson-Patman.

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FWS PERSONNEL.--Charles A. Carter, prominent fishery economist, is now working with the Branch of Commercial Fisheries, Fish and Wildlife Service. Before his retirement several years ago, Carter was a staff member of the Tariff Commission. He has been assigned to outline a projected economic survey of the shrimp industry under the Saltonstall-Kennedy research program. The survey was requested by the Atlantic States Marine Fisheries Commission and the Gulf States Marine Fisheries Commission.

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MARKETING OUTLOOK.--Civilian consumption of fresh and processed edible fishery products during the next 4 or 5 months is expected officially to be close to the per capita rate of a year earlier. The Fish and Wildlife Service, in cooperation with the Agriculture Department, makes this prediction.

The government agencies say fish supplies during the winter months are likely to be a little larger than during the same time last year. Retail prices, they predict, may average a little lower. Not only will the larger supplies of fish exert a downward pressure on prices, but "competition from meats and poultry products is expected to be much keener than last fall and winter."

Size of U.S. Catch

The catch of fishery products in the United States and Alaska during 1952 totaled slightly over 4.4 billion pounds, valued at 360 million dollars to the fishermen according to "Fisheries of the United States and Alaska," recently published by the Fish and Wildlife Service.

While this was approximately the same total poundage as in the previous year, there was considerable variation in the catch of individual items among the major fisheries; menhaden, oyster and shrimp production increased, while the take of Pacific mackerel and sardines, ocean perch and salmon dropped.

For the first time, shrimp was the most valuable species ($55 million), followed by tuna ($49 million) and salmon ($45 million). The species taken in greatest volume was menhaden (1.4 billion pounds), followed by salmon (352 million pounds) and tuna (325 million pounds). Record catches were reported for menhaden and shrimp. The catch of Pacific sardines dropped from 329 million pounds in 1951 to 14 million pounds in 1952. Ocean perch landings also decreased sharply.

Purse seines accounted for 1.8 billion pounds; otter trawls for 1.1 billion pounds; and lines for 500 million pounds.

The catch was made by 152,500 fishermen, operating 88,300 fishing craft of all types from small skiffs to large ocean going tuna clippers and trawlers.

Mackerel Catch Is Low

The Pacific mackerel may be going the way of the vanishing sardine. California Department of Fish and Game figures show the 1953-54 catch of 7,600,000 pounds to be the lowest in 26 seasons.

Not since 1928, when the Pacific mackerel first became popular as a cannery species, has the seasonal catch dropped below 10,000,000 pounds. Annual hauls averaged over 100,000,000 pounds in the late thirties. The highest postwar catch was about 50,000,000 pounds in 1949.

Particularly alarming, the Department's Marine Fisheries Branch emphasizes, is the fact that nearly all the fish in the 1953-54 catch were less than a year of age. Not only did they weigh less than a half a pound a piece, compared to the two pounds they could have reached if allowed to grow to maturity, but they got no chance to re-produce. These fish would not have spawned until April 1955; such hauls destroy the seed stock of the fishery.

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Tuna Catch in Gulf

The first commercial catch of tuna in the Gulf of Mexico was landed last month at Pascagoula, Miss., according to an announcement by Secretary of the Interior Douglas McKay.

The fishing vessel *Santa Antonino*, captained by John Rawlings, made port with 12½ tons of prime yellowfin tuna taken in the central Gulf region. The fish weighed about 100 pounds each.

Last spring Fish and Wildlife Service specialists aboard the exploratory fishing vessel *Oregon* discovered that yellowfin were widely distributed in the Gulf and could be taken at subsurface levels with modified Japanese-style longline gear. Three successful tuna trips have been made to various parts of the Gulf and have found that the central Gulf's northbound current, between 88° and 99° west longitude, affords the best yellowfin fishing at the present time.

Another commercial vessel, a converted red snapper schooner operating out of Pensacola, Fla., also has begun tuna fishing in the Gulf. Commercial interests in Mississippi are now reported to be outfitting a longline vessel, scheduled to begin tuna operations soon.

Sardine Spotting Flight

To determine the coastal distribution and approximate abundance of sardines off the coast of Southern California, the Department of Fish and Game made a flight in the "Beechcraft," October 2, 1954. Surveyed was the inshore area between Santa Barbara and the California-Mexico border and around the southern end of Santa Catalina Islands.

A total of 80 schools of fish were tallied and it was estimated that 74 of these were sardines. Estimation of the quantity of fish in these schools was difficult due to the present exploratory state of the aerial survey work but best information indicated that a few of the largest schools contained between 900-1000 tons each. Most of the schools were smaller than this ranging from about 10 to 300 tons with an average of somewhere around 100-150 tons per school.

All the sardine schools observed off the Long Beach area were small, 10-50 ton crescentic shaped, fast moving surface schools. Most of the larger schools in the area between Pt. Dume and Ventura were deep round or oval shaped schools that showed little evidence of movement.

The anchovy schools were small 10-30 ton schools near the surface close in to the beach.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY ACT OF CONGRESS OF PAN AMERICAN FISHERMAN, PUBLISHED MONTHLY AT ORANGE, CALIFORNIA, FOR OCT. 1, 1954.

State of California)
County of Orange) ss.

Before me, a notary public in and for the State and county aforesaid, personally appeared Briant Sando, who having been duly sworn according to law, deposes and says that he is the publisher of Pan American Fisherman and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, as amended by the Acts of March 3, 1933 and July 2, 1946, embodied in section 537, Postal Laws and Regulations, to wit:

1. That the names and addresses of the publisher, editor, and business managers are: Publisher, Briant Sando; Editor, Robert K. Lawson; Business Manager, Briant Sando, Orange Savings Bank Bldg., Orange, Calif.

2. That the owners are Briant Sando and Anne M. Sando, Orange Savings Bank Bldg., Orange, Calif.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustees is acting, is given; also the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds or other securities than as so stated by him.

BRIANT SANDO, Publisher

Sworn to and subscriber before me this 1st day of October, 1954.

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